

“MY DEAR SIR,—Natural history has been so little my study that I should not have presumed to claim a place among observers if you had not encouraged me to believe that a record of an observation which I made some time since on the habits of the *Balanus* may possess some interest among naturalists. I had at that time a small marine aquarium, in which I often kept specimens of *Serpulæ*, Sea-anemones, *Balani*, &c. It was placed on a shelf, where it had a good through light, and any movements or actions of its occupants could be well seen. On one occasion I watched for some minutes a proceeding in a group of the common *Balanus*, which I have no doubt was the process of impregnation. A long flexible thread-like instrument, of at least double the length of the cirrus, proceeded from near the centre of one of the creatures, and was waved around as if in quest of something. On meeting the cirrus of some of the surrounding animals this was eagerly seized and inserted into them successively, all the animals during the operation giving evidence of a high state of excitement. I regret that, from not being aware at the time that the observation might possess any value, I did not make a record of it, nor did I observe the details with as much minuteness as I should otherwise have done; but I have no hesitation in asserting that the above is substantially correct, and I should think the observation might be easily repeated if desired.

Yours truly, R. B.”

*Calcareous Sponges.* By H. J. CARTER, F.R.S.

With reference to the statement in the ‘Annals’ (vol. iii. p. 16, 1869) that the spicules of *Grantia ciliata* &c. which I had examined had no central canal, I now find, by subsequent examination, that a trace of something like one may often be seen towards the base of the straight arm of the triradiate spicule; and perhaps this may be patent here and there; but it is as often represented by a cast, probably of the same material as that composing the spicule, projecting from its fractured end, and this only in the fresh state, for the heat of mounting in balsam destroys it, while for the most part there is no trace whatever that I can observe. Nor does the calcareous spicule present the concentric lamination seen in the siliceous one, although both break with a similar conchoidal fracture. Perhaps the material, and not the organology, may account for these differences. At any rate, you have only to look for the axial canal in the siliceous spicule to see it, whereas in the calcareous one you can only fancy its existence here and there, in *Grantia ciliata*.

Budleigh-Salterton, May 28, 1869.

*Are Unios sensitive to Light?* By ISAAC LEA.

In the March No. of this Journal, p. 286 (‘Annals,’ May 1869, p. 399), Mr. C. A. White heads an article with “*Are Unios sensitive to light?*” He then gives some experiments which he instituted on the subject, and he seems to be under the impression that his observations were entirely new.

If your readers will turn to the ‘Proceedings of the Acad. Natural Sciences of Philad.’ for 1857, they will find a communication from me where the subject of *touch, hearing, and sight in the Unionidae*

was pretty fully stated. It will be found in my paper that I experimented on various species of the family, and pointed out some which gave no indication as to sensitiveness to light, while others were particularly sensitive, especially the *Unio radiatus*, Lam. I there stated that the *visual organs* were placed on the fringes of the siphonal opening—that “with a good lens the terminal point of the tentacula may be observed to be rounded and furnished with at least the appearance of an eye; and that it would prove to be a true eye, however imperfect, there can be little doubt.” I also stated that I left the subject to Dr. Leidy, believing that “he would be able to make out the complete anatomy of the eye of the *Unio*.”

It was mentioned also in this paper that the females were more sensitive to light than the males.

Subsequently, in the introduction to my vol. vi., “Observations on the Genus *Unio*,” &c., I mentioned the subject again, and stated that I had found that the *Unio rubiginosus*, Lea, *U. cylindricus*, Say, and *An. imbecillis*, Say, were all sensitive to light.

On referring to my notes made since the above-mentioned publication, I find that during the years 1858–60, I found the following species “very sensitive to light,” viz. *Unio subrotundus*, Lea, *U. pyramidatus*, Lea, *U. obscurus*, Lea, *U. pustulosus*, Lea, *U. Æsopus*, Green. The further investigation of the subject is well worthy the attention of malacologists who are so situated as have all the conveniences of exploration, investigation, and time.—*Silliman's Journal*, May 1869.

*On a new mode of Development of the Siphonophora.*

By A. PAGENSTECHER.

The author describes a new young form of Siphonophore captured by him at Mentone. It consists of a spherical membranous envelope cut off as it were at one pole, reaching a diameter of half a centimetre, within which a small Siphonophorous colony is suspended by a short cord. The attachment is effected in such a manner that there is upon one side of it a portion comparable to the swimming-column, but not furnished with pieces differentiated into bells—and on the other side the axial filament or stem, on which polyp-bodies are gradually developed by notching of the margin; these subsequently develop urticating apparatus at their base, and each draws out a separate peduncle.—*Verhandl. des Naturh.-medic. Vereins zu Heidelberg*, Band iv. p. 196.

*Anomalurus fulgens, a new Species from the Gaboon.*

The British Museum has just received a specimen (without the skull) of a beautiful and distinct species of *Anomalurus* from the Gaboon. The tail is short, and studded with distinct spines on the underside of the base. The fur is very soft and bright, nearly uniform orange-red; the head rather brighter, with a tuft of white hairs at the outer side of the base of the ears. The underside is rather paler, and whitish on the sides of the abdomen. The upper lip is yellow. The tail is very slender, pale brown, with a pencil of darker hairs at the tip. The hair of the back is pale red for the greater part of its length, with bright dark-orange-red ends, which are frequently terminated by a pale-yellow tip.—J. E. GRAY.